

Terminal displays

QT-04-0788

The terminal displays

In the Synclavier Digital Audio System, the keyboard and the computer terminal interact to create a complete control system. You have already used the Timbre Directory, the Sequence Directory, the Music Notation Display and the Recorder Display. In this section you will look at other terminal displays and learn the purpose of each.

The Sequence Editor Display

The Sequence Editor is used to cut, paste and transpose sections of a sequence. You can also use it to select tracks and operate the Memory Recorder from the terminal.

- Select the Sequence Editor Display from the Main Menu.

The display is divided into several panels, each controlling different aspects of the editing process. See the *Sequence Editing* manual for instructions.

When you have finished looking at the Sequence Editor, return to the Main Menu.

- Click the exit box in the upper right corner of the display, or press Enter on the terminal keyboard.

Sequence Editor

SEQUENCE EDITOR

START STOP RECD PUNCH CONT << >> ERASE CLR SOLOS

01:22:36.19.2

■

Cut Move Copy

Paste Merge Fill

CUT : Deletes Notes & Time

TO : Clipboard

PASTE : Insert Notes & Time

FROM : Clipboard

COUNT : 1

Cut

Paste

Both

Clipboard Length
00:00:23.14.03

☒ Cut Start : 00:00:00:00.00

☒ Cut End : 00:00:00:00.00

☒ Paste At : 00:00:00:00.00

Click: ON Just: OFF SMPTE

☒ Mark: ON 00:00:00:00.00

Save Sequence

Unsave Sequence

Unwrap Loops

Bounce

SMT

SKT

Track Volume

Transpose

M1	M2	M3	M4	M5	M6	M7	M8
1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32
33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48
49	50	51	52	53	54	55	56
57	58	59	60	61	62	63	64
65	66	67	68	69	70	71	72
73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88
89	90	91	92	93	94	95	96
97	98	99	100	101	102	103	104
105	106	107	108	109	110	111	112
113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128
129	130	131	132	133	134	135	136
137	138	139	140	141	142	143	144
145	146	147	148	149	150	151	152
153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168
169	170	171	172	173	174	175	176
177	178	179	180	181	182	183	184
185	186	187	188	189	190	191	192
193	194	195	196	197	198	199	200
L1	L2	L3	L4	L5	L6	L7	L8

L1 L2 L3 L4 L5 L6 L7 L8

The terminal displays (con't)

The Multichannel Display

You use the Multichannel Display to link the Synclavier to a standard multitrack mixing board.

1. Recall any sequence to the Memory Recorder.
2. Select the Multichannel Display from the Main Menu.

The keyboard and each track is listed with its currently assigned routing for both right and left channels.

You can change any of these routings by moving the cursor and typing the new assignment. You can also make the changes by using the TRACK ROUTING button on panel 2 of the keyboard control panel.

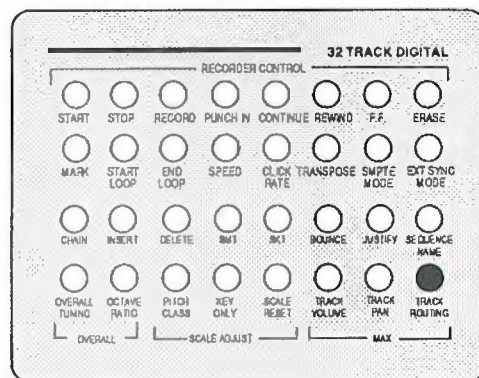
See "Multichannel Distributor" in the *Studio Operations* manual for complete instructions.

When you have finished looking at this display, return to the Main Menu.

Multichannel Display

Instrument Name		Left	Right	Poly	MULTICHANNEL ROUTING DISPLAY																																																			
KBD	RHODES	1	1	1	<div>1. Move cursor with arrow keys</div> <div>2. Assign new track numbers and routings</div> <div>3. Press space bar to increment values</div> <div>4. M/C Outputs: 32 Poly Bins: 1 DTD Outputs: 8</div>																																																			
1	ELECTRIC KIT	2	2	1																																																				
2	PHASED BASS	3	3	1																																																				
3	Music cues	*1*	*1*																																																					
4	Voiceover	*2*	*2*		<table><tr><td>21</td><td></td><td></td><td></td></tr><tr><td>22</td><td></td><td></td><td></td></tr><tr><td>23</td><td></td><td></td><td></td></tr><tr><td>24</td><td></td><td></td><td></td></tr><tr><td>L1</td><td>Vocals-Bob</td><td>*1*</td><td>*1*</td></tr><tr><td>L2</td><td>Vocals-Lynn</td><td>*2*</td><td>*2*</td></tr><tr><td>L3</td><td>Voiceover</td><td>*3*</td><td>*3*</td></tr><tr><td>L4</td><td>Foley 1</td><td>*4*</td><td>*4*</td></tr><tr><td>L5</td><td>Foley 2</td><td>*5*</td><td>*5*</td></tr><tr><td>L6</td><td></td><td>*6*</td><td>*6*</td></tr><tr><td>L7</td><td></td><td>*7*</td><td>*7*</td></tr><tr><td>L8</td><td></td><td>*8*</td><td>*8*</td></tr></table>				21				22				23				24				L1	Vocals-Bob	*1*	*1*	L2	Vocals-Lynn	*2*	*2*	L3	Voiceover	*3*	*3*	L4	Foley 1	*4*	*4*	L5	Foley 2	*5*	*5*	L6		*6*	*6*	L7		*7*	*7*	L8		*8*	*8*
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L7		*7*	*7*																																																					
L8		*8*	*8*																																																					
5	Effects 1	*3*	*3*																																																					
6	Effects 2	*4*	*4*																																																					
7	Effects 3	*5*	*5*																																																					
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Current Catalog: W0:



TRACK ROUTING button

The terminal displays (con't)

The MIDI Display

You use the MIDI* Display when you incorporate your Synclavier into a network of sequencers, rhythm machines and other audio processing equipment.

- Select the MIDI Display from the Main Menu.

The keyboard and each track is listed with its currently assigned MIDI OUT port and channel. You can change any of these assignments by moving the cursor and typing the number of the new port or channel. You can also make the changes by using the MIDI button on the keyboard control panel.

See "MIDI" in the *Studio Operations* manual for complete instructions.

When you have finished looking at this display, return to the Main Menu.

* Musical Instrument Digital Interface

MIDI Display

	Instrument Name	Out	Chan	Pres
KBD	RHODES			
1	ELECTRIC KIT	1	1	
2	PHASED BASS	1	1	
3	RIDE CYMBAL	1	1	
4	BONGO BELLS	1	1	
5	PERCUSSION	1	2	
6	TRIANGLE	1	2	
7	CONGA	1	3	
8	VIBES	1	3	
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

MIDI ROUTING DISPLAY

1. Move cursor with arrow keys
2. Assign new track numbers and routings
3. Press space bar to increment values
4. Available outputs: 4

Sync In: OFF Out: 1 Inputs: ALL Echo: ON

21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
32			

Current Catalog: W0

TIMBRE CONTROL

VIBRATO

WAVE	RATE	DEPTH	MOD DEPTH	ATTACK DECAY	INVERT	QUANTIZE	BIAS
WAVE	RATE	DEPTH	PAN	PARTIAL CHORUS	ON/OFF	MODE	RATE

REAL-TIME EFFECTS

EXPRESSION INPUTS

VELOCITY	PRESSURE	PEDAL 1	PEDAL 2	MOD WHEEL	WHEEL	KEYBOARD	BREATH
INFO	SENSITIVITY	RESPONSE	MID	PERFORM	RECORDER	OVERWRITE	CLEAR

MIDI button

The terminal displays (con't)

The Sound File Directory

The Sound File Directory lists all the sound files stored on your system. The list can be sorted either by filename, subcatalog or category (optical disk). Each sound file can include a caption and length as well as a filename.

1. Select the Sound File Directory from the Main Menu.

At the top of the screen is a selection panel where you can select the device, sorting method and what is to be included in the list. Some of the devices are

W0: Winchester attached to WINCHESTER 0
W1: Winchester attached to WINCHESTER 1
F0: Floppy drive attached to FLOPPY DRIVE 0
F1: Floppy drive attached to FLOPPY DRIVE 1
O0: Optical disk

Also listed are **All Winchesters**, which displays all sound files stored on Winchesters, and **Poly Memory**, which displays all sound files currently in polyphonic sampling memory.

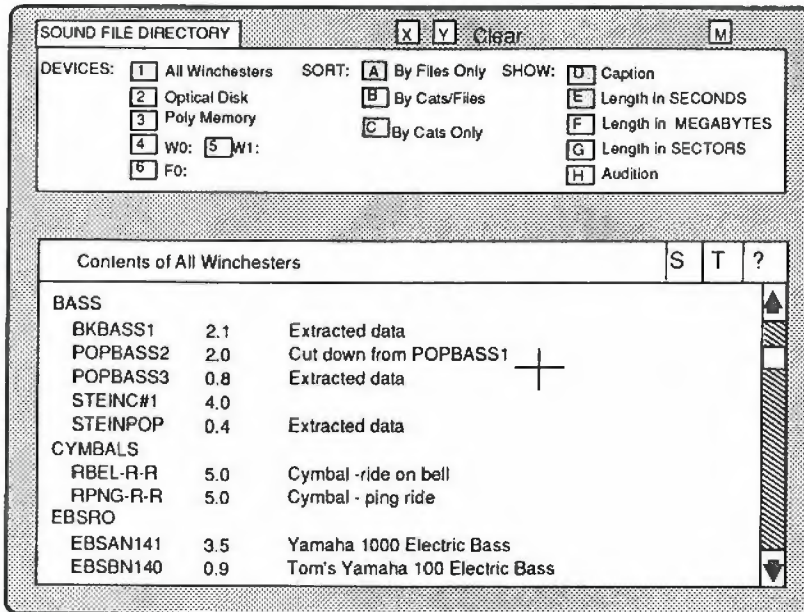
2. Select **All Winchesters** by typing

2

or by clicking it.

(con't next page)

Sound File Directory



3. Scroll through the list of sound files by using the scroll bar at the right of the sound file window.

Notice that the sound files are grouped. Each group is stored in a special storage area of your Winchester called a **subcatalog**.

4. Scroll to the subcatalog named **drum-cym** and locate the sound file named

cross 1

5. Click the sound file name.

A cross-stick becomes the current timbre.

The terminal displays (con't)

The Sound File Editor

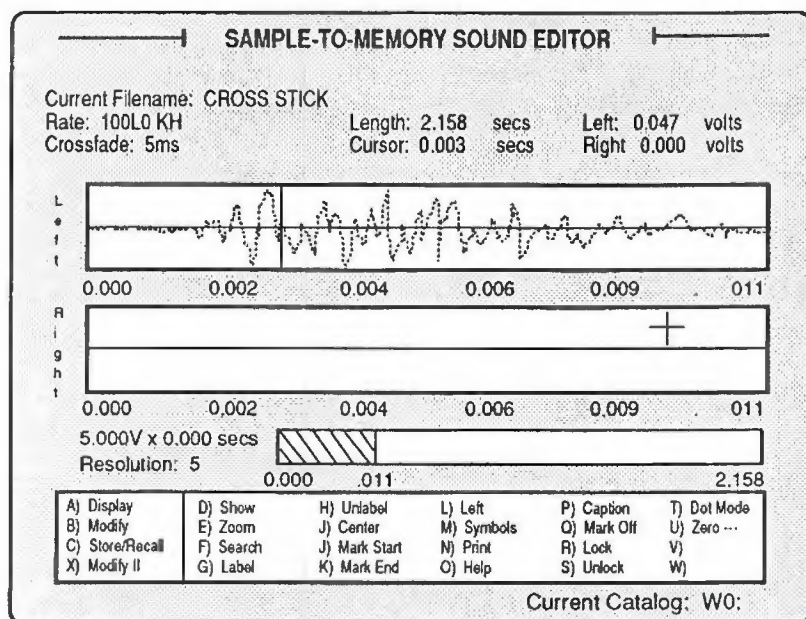
The Sound File Editor records and modifies sounds. You can sample instruments directly into poly memory. You can also recall recorded samples and modify them.

1. Press Enter to return to the Main Menu.
2. Select the Sound File Editor.

The waveform of the current timbre appears on the screen. Since the cross-stick was sampled monophonically, the waveform appears only in one channel.

See the *Sampling and Sound Editing* manual for complete instructions.

When you have finished looking at this display, return to the Main Menu.



Sound File Editor

The terminal displays (con't)

The Patch Display

You can assign different sound files to different regions of the keyboard by using the Patch Display.

1. Select the Timbre Directory from the Main Menu.
2. Select the **live drums** timbre.

This sound contains samples of nine different percussion instruments. Each sample has been **patched** to a different key or set of keys.

3. Return to the Main Menu and select the Patch Display.

The Patch Display appears with a list of the sound files patched on the first partial timbre. In the two columns to the right of the filenames are columns labeled **start** and **end**. The pitches listed in these columns indicate the keyboard range for each sound file.

4. Press the Spacebar.

The display shows the sound files that are patched on the second partial timbre.

5. Press the Spacebar again.

The display shows the sound file that is patched on the third partial timbre.

You can use the Patch Display to create your own keyboard patches. Complete instructions are in the *Sampling and Sound Editing* manual.

SOUND FILE "PATCH" DISPLAY

1. Use this screen to create Patch Lists. Press ? for more information.
2. Move cursor using arrow keys. Enter new values.
3. Select Partial Timbre from button panel or by pressing space bar.
4. Press <CTRL-C> to view directory of Sound Files in Current Catalog.
 <CTRL-E> to enter a different Subcatalog.
 <RETURN> to view Keyboard Display.
 <ENTER> when done with this screen.

KeyboardTimbre: 1-1-2: "LIVE DRUMS .37"
 Current Catalog: W0:

Partial #1:

Memory Left: 10876 Sectors

File	Start	End	Volume	Transpose	Tuning	Total	Length	Loop	Length
1. BD2-F	C3	C3	100.0	C3	0.00	0.000	000	0.000	000
2. CROSS1	D3	E3	100.0	D#3	0.00	0.000	000	0.000	000
3. SN2	C4	C4	100.0	C4	0.00	0.000	000	0.000	000
4. SN2	D4	D4	100.0	D4	-0.5	0.000	000	0.000	000

The terminal displays (con't)

The Keyboard Display

The Keyboard Display is accessed from the Patch Display, and shows all the keys with the name of the sound file assigned to each.

1. With the Patch Display on the screen, press Return.

The Keyboard Display replaces the Patch Display and shows the percussion sound files of partial timbre 2, placed on their assigned keys.

2. Type 1 on the terminal keyboard.

The Keyboard Display shows the sound files of partial timbre 1, placed on their assigned keys.

When you are finished with this display, return to the Main Menu.

The terminal displays (con't)

The Optical Disk Display

You store sound files on the optical disk by using the Optical Disk Display. You can also organize the sound files for easier recall, and edit their identifying filenames, captions and categories.

- Select Optical Disk Storage from the Main Menu.

At the top of the display is the **information panel** which contains information about the selected sound file, including its caption and categories.

The bottom of the display is separated into two windows. Each has a scroll bar that is used to scroll through the list.

- The **optical disk window** (on the left) displays the contents of the current volume in the optical drive.
- The **sound file window** (on the right) displays a list of sound files on any selected storage device.

See *Organizing and storing sounds* for complete instructions about the Optical Disk Display.

When you have finished looking at the Optical Disk Display, return to the Main Menu.

- Click the exit box in the upper right corner of the display, or press Enter on the terminal keyboard.

Optical Disk Display

OPTICAL DISK STORAGE					
Sound File:	W1:PIG001 <input type="button" value="Store"/> Update: <input type="button" value="Source"/>				
Caption:	Snorts, angry				
Categories:	<table border="1"> <tr> <td>ANIMALS</td> <td>FARM</td> </tr> <tr> <td>ANIMALS:PIGS</td> <td></td> </tr> </table>	ANIMALS	FARM	ANIMALS:PIGS	
ANIMALS	FARM				
ANIMALS:PIGS					
<input type="button" value="Clear"/>					
Free: 212					

Contents of Optical Disk	T	?
AIRPLANES: HELICOPTERS		▲
AIRPLANES: JETS		
ANIMALS: BIRDS		
ANIMALS: COWS		
ANIMALS: DOGS		
ANIMALS: DONKEYS		
ANIMALS: HORSES		
ANIMALS: PIGS		
ANIMALS: SHEEP		
APOCALYPSE: HELICOPTERS		▼

<input checked="" type="checkbox"/> Contents of W1:	T	?
BIRDS		▲
CLUCK001 QUACK001		
QUACK002 CROW001		
SONG001 SONG002 SONG003		
SONG004		
COWS		
MOO001 MOO002		
DOGS		
BARK001 BARK002		▼

Load Volume	Categories Only
Free Space	Dir 99% Data 96%

SHOW: Names Only
FUNCTION: Recall & Audition

The terminal displays (con't)

The Graphic Timbre Display

You can look at a graphic representation of any synthesized timbre. The display shows the harmonics of the timbre as well as its **volume envelope** (attack, initial decay, sustain and final decay). In the Timbre Directory, the name of each synthesized timbre is followed by (s).

1. Select the Timbre Directory from the Main Menu.
2. Select the timbre named

space voices (s)

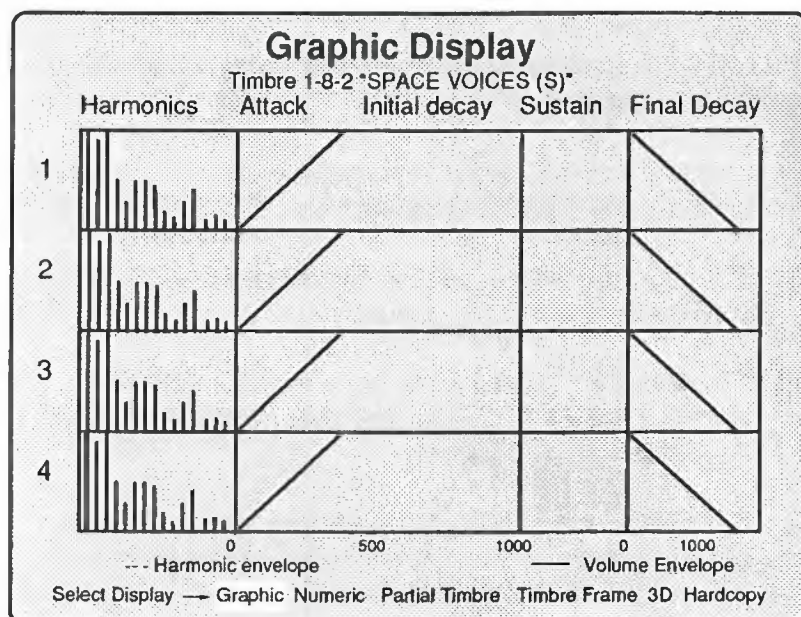
3. Return to the Main Menu and select FM Timbre Display.

The Main Menu is replaced by the Graphic Timbre Display. At the bottom of the screen is a list of other displays that can be accessed from the Graphic Timbre Display.

Space voices (s) contains four partial timbres. Notice the four horizontal sections in this display, each representing one partial timbre.

The left part of each section is a bar graph of the harmonics.

Graphic Timbre Display



The terminal displays (con't)

The Partial Timbre Display

You can look at each partial timbre separately by using the Partial Timbre Display.

The cursor is at the bottom of the screen on the currently selected Graphic Timbre Display.

1. Use the right arrow key to move the cursor to Partial Timbre, and press Return.

The Graphic Timbre Display is replaced by the Partial Timbre Display. The first partial timbre of **space voices (s)** is shown.

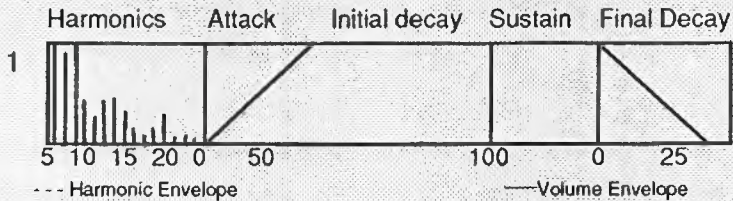
2. Recall the **solo violin (s)** timbre by using the numbered buttons on the fourth panel of the keyboard control panel (BANK 8, ENTRY 5).

The display is redrawn to show the first partial timbre of the new timbre.

Partial Timbre Display

PARTIAL TIMBRE DISPLAY

Timbre 1-8-2 "SPACE VOICES (S)"

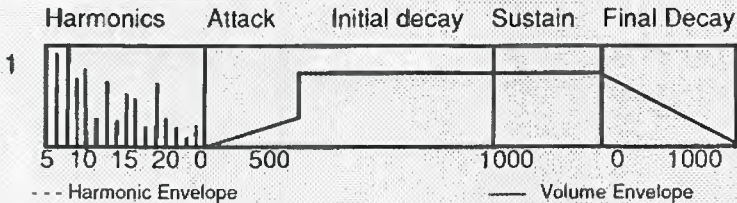


Timbre Frames: 0 Vib Wave: Tri Stereo Wave: 0 PortOn/Off: On
 Partial Tuning: 439.7 Vib Rate: 5.95 Stereo Rate: 0.00 Port Mode: Log
 Random Pitch: 0.00 Vib Depth: 0.14 Stereo Depth: 0 Port Rate: 0.500
 Partial Volume: 100.0 Mod Depth: 0.00 Stereo Pan: -13
 FM Ratio: 1.000 Attack: 722
 Partial Chorus: 1.000 Invert: Off
 Quantize: Off
 Bias: Off

Press space bar to select partial. Press <ENTER> for Main Menu
 Select Display — Graphic Numeric Partial Timbre Timbre Frame 3D Hardcopy

PARTIAL TIMBRE DISPLAY

Timbre 1-8-5 "SOLO VIOLIN (S)"



Timbre Frames: 0 Vib Wave: Sin Stereo Wave: 0 PortOn/Off: Off
 Partial Tuning: 440.0 Vib Rate: 5.46 Stereo Rate: 0.00 Port Mode: Lin
 Random Pitch: 0.00 Vib Depth: 0.20 Stereo Depth: 0 Port Rate: 0.000
 Partial Volume: 100.0 Mod Depth: 0.00 Stereo Pan: 0
 FM Ratio: 2.509 Attack: 0
 Partial Chorus: 1.000 Invert: Off
 Quantize: Off
 Bias: Off

Press space bar to select partial. Press <ENTER> for Main Menu
 Select Display — Graphic Numeric Partial Timbre Timbre Frame 3D Hardcopy

The terminal displays (con't)

Other Timbre Displays

Some of the synthesized timbres have been constructed with a harmonic structure that changes over time. The 3D Harmonic Display shows the changing waveform of a single partial timbre.

1. Move the cursor at the bottom of the screen to 3D, and press Return.

The 24 harmonics of the **solo violin (s)** timbres are plotted along the x-axis with their amplitude plotted on the y-axis. The third axis, the time axis, shows the waveforms of the partial timbre at given moments in time.

2. Take some time to look at the remaining two timbre displays, the Numeric Display and the Timbre Frame Display. These two displays give information about the timbre in numeric form.

Notice also the **hardcopy** option. Any timbre display can be printed on your printer.

3. When you have finished looking at the timbre displays, return to the Main Menu.

3D Harmonic Display

